

REMARKS

Claims 1-7, 9-12, 14-25, 27-30, 32-43, 45-48, 50-58, and 60-65 are pending in this application. By this Amendment, claims 8, 13, 26, 31, 44, 49, and 59 are canceled, claims 1, 9, 14, 15, 19-22, 27, 32, 33, 37, 45, 50, 51, 55, 60, and 61 are amended, and claims 64-65 are added. Reconsideration and allowance in view of the amendments and following remarks are respectfully requested.

The Office Action indicates that claims 1-63 have been rejected on the basis of being anticipated by the cited reference. The Applicant respectfully submits that the invention is novel and the independent claims have been amended solely in the interest of clarifying the distinctions between the present invention and the cited reference, and to further the prosecution of the present application. No new matter is submitted by the claim amendments or additions. Support for added claims 64 and 65 may be found in the specification on page 11, line 10 to page 12, line 3 and in Figure 12, for example. Reconsideration and withdrawal of the rejection is respectfully requested.

I. The Objection to the Claims

The Office Action objects to the claims asserting a minor informality. The claims have been amended in response to the objection. It is respectfully submitted that the claims satisfy all formal requirements.

II. The Claims Define Patentable Subject Matter

The Office Action rejects all claims under 35 U.S.C. 102(b) as being anticipated by Beland (U.S. Patent No. 5,966,425). The rejection is respectfully traversed.

Claim 1 is amended and now recites a "A voltage divider system (102), comprising: a high voltage impedance element (104), connected to an input node for receiving an input signal;

a low voltage impedance element (106), connected to the high voltage impedance element (104); at least one guard element (118), the at least one guard element (118) being coupled between the high voltage impedance element (104) and ground; wherein the at least one guard element (118) comprises at least one capacitive element; and wherein the at least one guard element (118) further comprises at least one resistive guard element (124) coupled to the at least one capacitive element.” It is respectfully submitted that Beland fails to teach or suggest the claimed features and in particular the guard element comprising of at least one resistive guard element coupled to the at least one capacitive element.

The Office Action asserts that “Beland discloses a resistive guard element/resistor (conductive shield segments shown in Figure 8, each with a resistance, are considered as the resistive guard elements/resistors) coupled to the at least one capacitive element (capacitive series 181 in Figure 8), which increases a stability of a voltage drop across the high voltage impedance element/means (resistor series 182 in Figure 8).” This assertion is traversed. Applicant respectfully submits that Beland in no way teaches at least one guard element including a resistive guard element coupled to a capacitive guard element.

Beland teaches a high-voltage power supply and regulator circuit for an X-ray tube which utilizes solid-state switching devices with feedback control for real time monitoring and protection against failure due to excess current or voltage spikes. The patent also provides shielded voltage dividers to accurately measure the voltage outputs and produce feedback control signals. (See Beland, Abstract). Particularly, Beland teaches a shield that includes fifteen capacitors C2 in series, forming capacitor series 181. Fifteen diodes CR1 are provided in parallel with these capacitors to clamp the output voltage at terminal 180 to prevent the output voltage from reversing polarity during an X-ray tube arc. (See Beland, col. 15, lines 27-32,

describing Figure 8). Furthermore, Beland teaches that “[c]onductive metallic shield segments 183 above and below the resistor divider 182 are coupled to the capacitor series 181 for dissipating stray capacitance.” (col. 15, lines 32-34).

Applicant respectfully traverses the assertions in the Office Action and submits that the applied art does not teach or suggest the claimed invention. Claim 1 recites a guard element being coupled between the high voltage impedance element and ground, where the guard element is comprised of at least one resistive guard element coupled to the at least one capacitive element. One advantage of the present embodiment is that the resistive guard element maintains a well-defined voltage distribution at lower frequencies down to direct current, as described in the application on page 10, lines 13-15. In contrast to the present invention, Beland teaches a shield that includes capacitors in series. Beland also teaches placing diodes in parallel with these capacitors; using conductive metallic shield segments above and below the resistor divider; and coupling those metallic segments to the capacitor series. Thus, Beland does not disclose or teach all claimed elements of the present invention.

To explain further, the Office Action asserts that the conductive shield segments shown in Fig. 8 of Beland, each with a resistance are considered as the resistive guard elements/resistors. However, Applicant submits that such interpretation is misplaced and does not fairly teach the claimed invention. Claim 1 recites wherein the at least one guard element further comprises at least one resistive guard element coupled to the at least one capacitive element. In column 15, lines 27-34, Beland teaches that the shield includes fifteen capacitors C2 in series, forming capacitor series 181, and that fifteen diodes are provided in parallel with these capacitors. The Office Action appears to rely on an interpretation that Beland’s shield has a resistance inherently and thus teaches the claimed feature of: at least one guard element further comprises at least one

resistive guard element coupled to the at least one capacitive element. However, it is submitted that such interpretation of the teachings of Beland is not a fair interpretation and leaves the recitation of “at least one resistive guard element” meaningless, which of course is an inappropriate reading of the claimed invention. Beland’s shield having a resistance does not fairly teach the claimed resistive guard element and the interrelationship thereof to the other claimed features.

Further, for example, claim 14 recites wherein the at least one resistive guard element comprises at least one resistor coupled to the at least one capacitive element. Accordingly, claim 14 recites the claimed invention in further detail. In a similar manner to claim 1, it is respectfully submitted that Beland cannot fairly be interpreted to teach the clearly recited features relating to the “at least one resistor” of claim 14.

Accordingly, it is respectfully submitted that claim 1 defines patentable subject matter for the reasons set forth above. Further, it is submitted that claims 19, 37, and 55 define patentable subject matter for reasons similar to those set forth with respect to claim 1.

Further, the dependent claims define patentable subject matter based on their various dependencies on such independent claims, as well as the additional features such dependent claims recite. Also, dependent claims 64 and 65 have been added to recited further novel features of the claimed invention. Withdrawal of the rejection under 35 U.S.C. 102(b) is respectfully requested.

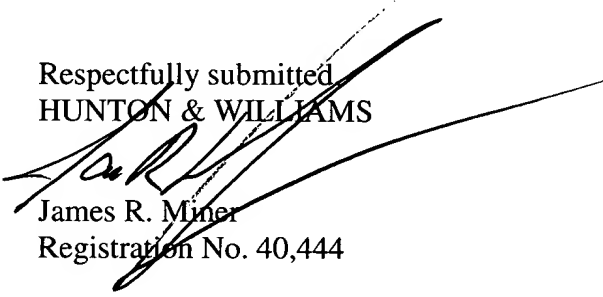
III. Conclusion

For at least the reasons outlined above, Applicant respectfully asserts that the application is in condition for allowance. Favorable reconsideration and allowance of the claims are respectfully solicited.

Should the Examiner believe anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number listed below.

For any fees due in connection with filing this Response, the Commissioner is hereby authorized to charge the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,
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